

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of)
SAMUEL A. MILLIKEN, WILLIAM CLARDY)
and SONNY KANLIAN for Review of)
Order No. 80-35 of the California)
Regional Water Quality Control)
Board, Colorado River Basin Region.)
Our File No. A-274)

Order No. WQ 81-15

BY THE BOARD:

On May 21, 1980, the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) adopted waste discharge requirements in Order No. 80-35 for the Coachella Valley Water District, Improvement District No. 58 (discharger). The waste discharge requirements regulate the discharge of wastewater from the discharger's new sewage treatment plant.^{1/} The requirements permit the discharge of 700,000 gallons per day (gpd) to four percolation ponds for subsurface disposal.

On June 20, 1980, the State Water Resources Control Board (State Board) received a petition from Samuel A. Milliken, William Clardy and Sonny Kanlian (petitioners) seeking review of the order. On September 19, 1980, the petitioners filed a request for a stay of the order. The petitioners own or lease land in the vicinity of the treatment facility.

-
1. According to the record before us, construction of the plant has been completed and the plant is already operating.

On November 20, 1980, the State Board issued Order No. WQ 80-21, denying the request for a stay of Order No. 80-35. An order addressing the merits of the petition was scheduled for State Board discussion on May 21, 1981. At the request of the discharger, such consideration was delayed. The reason for the delay was the fact that the Regional Board adopted revisions to its Water Quality Control Plan on May 20, 1981. These revisions, in turn, related to issues raised in the petition. The discharger responded to such issues on September 8, 1981. The petitioner also filed a response, dated October 6, 1981.

Because of the circumstances which have led to the delay in resolving this petition, we will review the issues raised therein notwithstanding the fact that the petition was filed more than 270 days ago.

I. BACKGROUND

The Coachella Valley Water District proposed to operate a sewage treatment plant which will discharge 700,000 gpd of domestic sewage into four mechanically aerated lined basins. The oxidized wastewater will then flow into two lined settling basins, and then into four percolation basins for final subsurface disposal.

The plant serves the discharger's Improvement District No. 58. No federal or state funds are being used in the project, funding being provided by a local bond issue. The petitioners are local landowners and lessees who opposed construction of the plant, and who oppose the possibility of its expansion. The

petitioners claim that discharges from the plant will adversely affect the groundwater quality in the area, that prime agricultural land should not be used for a treatment plant, and that alternative facilities are available. The petitioners also contend that the design capacity of the plant will be inadequate to handle the actual flow.

II. CONTENTIONS AND FINDINGS

1. Contention: The petitioners contend that the discharge will result in nitrate levels in the groundwater which exceed the limits set by the Water Quality Control Plan.

Finding: The petitioners claim that the water quality objectives and treatment standards contained in the Regional Board's Water Quality Control Plan (Basin Plan) will be violated by discharges from the plant. Specifically, the petitioners contend that the limitations for nitrate discharges to the groundwater basin will be violated. A reclamation project, the petitioners claim, would result in a lesser discharge of nitrates to the groundwater basin.

The Basin Plan, adopted in 1975, sets forth water quality objectives for groundwater in the West Colorado River Basin for nitrates and other constituents.^{2/} The Basin Plan further provides that these objectives, in conjunction with water quality maps set forth in the Basin Plan and well data, are to be used as a guide in setting waste discharge requirements.^{3/} The Basin Plan also provides that the water quality objectives may

2. Basin Plan, Table 4-5.

3. Basin Plan, at page I-4-12.

be modified as additional data becomes available, particularly through the Regional Board's surveillance and monitoring program.^{4/} In its response to the petition, the Regional Board states that the water quality objectives contained in Table 4-5 are "unrealistic" and that revised objectives are now being pursued.^{5/}

From the foregoing discussion, we agree with the Regional Board that the water quality objectives contained in the Basin Plan are not meant to be absolute maximum limitations for incorporation into waste discharge requirements. It does appear, however, that nitrate loading is a concern in the Colorado River Basin and that the nitrate loading of discharges from the discharger's treatment plant was a legitimate concern of the Regional Board.^{6/} Currently, the waste discharge requirements permit only relatively small subsurface discharge but contain no limitations on nitrates.

4. Ibid.

5. In fact, the May 20, 1981 revisions to the Water Quality Control Plan deleted numerical objectives for nitrate in the Indio subarea except for the public health standard of 45 mg/l. While such revisions are not effective until State Board approval, they are an indication of Regional Board intent. State Board staff have asked for additional information from the Regional Board regarding the Water Quality Control Plan revisions by letters dated August 4, 1981 and October 13, 1981. State Board consideration of the Water Quality Control Plan revisions will not be scheduled until such information is received.
6. In fact, the revised Water Quality Control Plan states that all sources of nitrate contribution to groundwaters should be controlled where feasible (page 4-5).

The record before us indicates that the discharger plans only a temporary discharge of 700,000 gpd to percolation ponds. The discharge would eventually be replaced by a larger activated sludge facility, with disposal of the effluent by reclamation. The record does not make clear when this transition would occur, and there is no date of termination or time schedule in the waste discharge requirements.

A preliminary study by the State Board^{7/} concluded that the groundwater basin in the Upper Coachella Valley is being threatened by discharges of nitrate from various sources, including municipal treatment facilities. While the discharger submits that this study overstates the nitrate loading problem, it does recognize this problem is an area of proper concern to the Regional Board. It appears that further analysis is necessary to determine more accurately the extent of the nitrate problem in the upper Coachella Valley. It is our concern that the discharge from the discharger's plant could, if it is increased or if it continues over a long period of time, contribute to the continuing degradation of this groundwater basin. The data before us, at this time, however, do not constitute substantial evidence that unreasonable degradation will occur. (See Water Code Section 13280).

It is our determination that a comprehensive study of the problem of nitrate loading in the Upper Coachella Valley

7. R. Zipp, "Review and Analysis of Hydrology and Water Quality Upper Coachella Valley, Riverside County, California" (January 1981).

groundwater basin is required.^{8/} This conclusion is based on the results of the preliminary study, the Regional Board's argument that the groundwater quality objectives in the Basin Plan are unrealistic and the absence of adequate hydrologic and geologic data on the groundwater. The study should be coordinated by the Regional Board, with data obtained from the various dischargers of both domestic and agricultural wastes and water users in the Upper Coachella Valley. It should also be coordinated with any studies called for by the Water Quality Control Plan revisions, should they be approved.

The significance of this study to all dischargers and water users in the Upper Coachella Valley must be emphasized. The potential problems associated with nitrate loadings, and the lack of clear evidence regarding sources of the loading, may require prohibitions or strict restrictions on all possible contributors if no clear solution is found. The emphasis of the study should therefore be on the nitrate loading and the need for groundwater quality objectives in the Basin Plan. The study should include a plan for action to protect the quality of the

-
8. Discharger argues that since the revised Water Quality Control Plan calls for an implementation plan to control nitrates in the groundwater, a separate requirement for a comprehensive study of nitrates in the Upper Coachella Valley is unnecessary. We disagree. If we eventually approve the Water Quality Control Plan revisions, the study we are requiring in this order will be consistent therewith. The revisions specifically indicate that more data are needed to develop recommendations to control nitrogen contributions from specific sources to the groundwaters. (Revised Water Quality Control Plan, May 20, 1981, page 4-5).

groundwater and to achieve and maintain appropriate groundwater quality objectives. The results of the study may indicate the need for further amendments to the Basin Plan objectives.

Given the need for a comprehensive study of nitrate loading, the Regional Board must insure adequate groundwater monitoring at the discharger's plant. The data obtained will supply a portion of the necessary information regarding nitrate loading in the basin. The waste discharge requirements currently do not require such monitoring. The requirements should therefore be amended to require data from monitoring wells in close proximity to the percolation ponds.^{9/} These wells should have the capability of determining whether the percolated wastewater travels in a southeasterly direction and at what speed and concentration.

It is necessary to assure that the current discharge will remain temporary and will not be expanded, unless the comprehensive study establishes that the discharge will not adversely affect the quality of groundwater in the area. For this reason, the waste discharge requirements should be amended to include an

-
9. Such a monitoring requirement is consistent with language of the revised Water Quality Control Plan that the "Regional Board will establish monitoring programs to:
 - a. Determine those groundwater areas where nitrate levels are increasing.
 - b. Determine sources of nitrate contribution in groundwater areas where nitrate concentrations are increasing."
(Pages 5-6 and 7).

expiration date five years from their adoption.^{10/} This period of time will be sufficient to allow the discharger time to develop plans for and, if necessary, to construct an activated sludge facility with reclamation of the effluent. The results of the study may indicate that the discharger could expand its current facilities without adversely affecting water quality. However, the discharger should be prepared to carry out plans for an alternative to discharge to percolation ponds.

We therefore conclude that protection of the nitrate level in the groundwater basin will be adequately protected from this discharge if the requirements are amended to include a termination date and monitoring, as specified above. The waste discharge requirements will be remanded to the Regional Board to make the appropriate amendments.

2. Contention: The petitioners contend that prime agricultural land is being used for this facility and that such a use is contrary to federal policy.

Finding: In support of their contention, the petitioners argue that the land being used for the treatment facility is developable as prime agricultural land. The petitioners further argue that the treatment facilities will be used to discharge

10. The discharger argues that there should be no expiration date. In support of this argument, 23 CAC Section 22322.2 is cited. This section of our regulations requires that the Regional Board Executive Officer shall review all waste discharge requirements at least once every five years. Given the issues raised in the petition, we feel the additional step of requiring an affirmative act by the Regional Board to renew the requirements, if appropriate, is justified. Water Code Section 13263 gives us clear authority to take such action.

wastes from a new development. Such use of prime agricultural land, the petitioners contend, is against policies of the United States Environmental Protection Agency (EPA) as expressed in its Policy to Protect Environmentally Significant Agricultural Lands.

The EPA policy does state that agency's intent to retain the agricultural character of environmentally significant agricultural lands through its actions such as funding treatment facilities and granting permits. The policy applies where it is proposed that such land be converted to treatment facilities for new developments. An NPDES permit, however, is not involved in the instant order, and no federal funding is being used. Therefore, the EPA policy is not applicable.

The petitioners further argue that this Board should, on its own, implement the EPA policy. It is our determination that, regardless of the merits of the EPA policy, this Board does not have jurisdiction to prohibit a discharge based on such a policy. In establishing waste discharge requirements, the Regional and State Boards must base their limitations and prohibitions on water quality concerns. See, e.g., Water Code Sections 13001 and 13263(a). While a lead agency must consider all effects of a project subject to the California Environmental Quality Act, a responsible agency may only consider the effects of those activities over which it has legal jurisdiction. (Public Resources Code, Section 21002.1(d).) In this case, the Regional Board is acting as a responsible agency and may consider only water quality consequences of the project.

We therefore conclude that this agency is without jurisdiction to prohibit the discharge on the grounds it will involve the use of prime agricultural land for a treatment facility.

3. Contention: The petitioners contend that other treatment facilities in the area can provide service for Improvement District No. 58.

Finding: The petitioners contend that two existing treatment plants, one in the Palm Desert area and one serving the City of Indio, could dispose of the wastes generated in Improvement District No. 58. Use of these existing plants, the petitioners argue, would be preferable to the construction of a new plant.

The reasons given in support of this argument are generally that use of the existing plants would be more cost-effective, would result in energy savings, and would be beneficial to agricultural production.

As was stated above, in Number 2, this Board is restricted to considering water quality concerns in this case and has no authority to prohibit the proposed discharge for non-water resource reasons. We therefore conclude that the discharge may not be prohibited on the basis that alternative treatment plants are available.

4. Contention: The petitioners contend that the planned capacity for the sewage treatment plant is inadequate.

Finding: The petitioners argue that the 700,000 gpd flow permitted by the waste discharge requirements will be inadequate to serve the 5,048 units which the discharger projects will be developed. The petitioners argue the flow will more likely approximate 1.3 million gallons per day (mgd), which will exceed the capacity of the percolation ponds. The petitioners further assert that the flow could reach 5 to 10 mgd, and that adequate planning regarding the impact of the plant has not been conducted.

The Regional Board and the discharger concede that the development in Improvement District No. 58 may ultimately be expanded to produce a flow of 5 to 10 mgd, but they argue that for the present time the limit of 700,000 gpd contained in the requirements will not be exceeded. The discharger also asserts that the plant will be converted to an activated sludge facility with discharge by reclamation.

Given the concerns regarding nitrate loading in the groundwater basin, which are discussed at Number 1, this Board is concerned with the potential expansion of the treatment plant. We note, however, that the waste discharge requirements specify that the maximum daily flow shall not exceed 700,000 gpd.

(Discharge Specification A.15.) The requirements also require that a report of waste discharge be filed with the Regional Board prior to any material change in the quantity of wastewater discharged. (Provision B.1.) Thus, any change in the flow of wastes to the plant which would result in a material change in the quantity of wastewater discharged would require revision of the waste discharge

requirements. Given our concerns voiced in Number 1 of this Order, an increase over 700,000 gpd should be based on, and compatible with, the results of the comprehensive groundwater study and the progress by the discharger toward implementation of secondary treatment and reclamation. That is, the waste discharge requirements should not be revised to expand the capacity of the plant unless such expansion is consistent with the results of the comprehensive study.

Regarding the petitioners' claim that adequate planning was not performed for this project, we note that an Environmental Impact Report (EIR) was completed. The record further discloses that the EIR was challenged in court and was subsequently upheld. We therefore conclude that the discharger completed the required planning process.

We conclude that the petitioners' concerns that the planned capacity for the sewage treatment plant is inadequate are addressed by the waste discharge requirements. We do feel, however, that any expansion of the discharge beyond 700,000 gpd should be preceded by completion of the groundwater study.

III. REQUEST FOR HEARING

The petitioners request a hearing for the purpose of presenting additional evidence to the State Board. Where such a hearing is requested, our regulations require that:

"...the petition shall include a statement that additional evidence is available that was not presented to the regional board or that evidence was improperly excluded by the regional board. A detailed statement of the nature of the evidence and of the facts to be proved shall also be included. If evidence was not presented to the regional board, the reason it was not presented shall be explained. If the petitioner contends that evidence was improperly excluded, the request for a hearing shall include a specific statement of the manner in which the evidence was excluded improperly." (23 Cal. Admin. Code Section 2050(b).)

In their hearing request, the petitioners state that while all points in the petition were covered at the Regional Board meeting where the requirements were adopted, the short time available before the meeting did not permit the petitioners to make a full presentation. The petitioners cite three ongoing studies which, they claim, would provide useful information regarding this matter. 11/

The petitioners appear to, argue that had their request for a continuance of the Regional Board hearing been granted, they would have had the opportunity to present the studies which were then in a preliminary state. As is noted above, one of the studies was considered by this Board. As to the other two studies--one involving a cost-benefit analysis of waste disposal alternatives and the other discussing a proposed refuge for the Fringe Toed Lizard--the petitioners have made no attempt to submit these as part of the record in this matter. According to the

11. One of these studies is the State Board study on nitrate loading in the groundwater basin, which is discussed above at Number 1. This preliminary report was made a part of this record and was considered herein.

petitioners' descriptions of these studies and the record before us, it appears that neither is of such immediate relevance as to have required postponement of the Regional Board hearing or a new hearing before this Board. In fact, both appear to concern non-water resource matters which are beyond the jurisdiction of this Board to consider. See discussion at Number 2, above.

We therefore conclude that a hearing before the State Board is not required in this matter.

IV. ADDITIONAL COMMENTS

In State Board Order No. WQ 81-5, we set forth an analysis to be followed in setting waste discharge requirements for the discharge of salts to groundwater basins with salt loading problems. This same analysis should be applied to requirements regulating the discharge of nitrates to basins with nitrate loading problems, such as the Upper Coachella Valley. The scarcity of data regarding the origins and the severity of the nitrate problem in this basin, however, preclude us from applying that analysis at this time. Therefore, once the comprehensive study of the basin has been completed, the Regional Board should follow the analysis set forth in Order No. WQ 81-5 in establishing waste discharge requirements for discharges of nitrates to the basin.

V. CONCLUSIONS

1. The waste discharge requirements will provide adequate protection of the nitrate level in the groundwater basin if amended to include an expiration date and groundwater monitoring.

2. A comprehensive study of the problem of nitrate loading in the Upper Coachella Valley groundwater basin should be coordinated by the Regional Board. This study should be coordinated with any studies called for by subsequent Water Quality Control Plan revisions.

3. Any change in the waste discharge requirements to expand the capacity of the discharger's plant must be consistent with the results of the comprehensive groundwater study.

4. A hearing before the State Board is not required.

5. In all other respects, the waste discharge requirements were properly adopted.

VI. ORDER

IT IS ORDERED that the petitioners' request for a hearing is denied.

IT IS FURTHER ORDERED that, for the reasons discussed above, the waste discharge requirements for the Coachella Valley Water District are remanded to the Regional Board to be amended to include an expiration date, groundwater monitoring requirements and a limitation on capacity increases, as described above.

IT IS FURTHER ORDERED that the Regional Board coordinate and complete a comprehensive study of groundwater in the Upper Coachella Valley, as described above.

In all other respects, the petition is denied.

DATED: December 17, 1981

/s/ Carla M. Bard
Carla M. Bard, Chairwoman

/s/ L. L. Mitchell
L. L. Mitchell, Vice-Chairman

/s/ Jill B. Dunlap
Jill B. Dunlap, Member

/s/ F. K. Aljibury
F. K. Aljibury, Member